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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,698	01/02/2002	Osamu Wada	111618	1789

7590 11/30/2005

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EXAMINER	
NELSON, ALECIA DIANE	
ART UNIT	PAPER NUMBER
2675	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/019,698	WADA, OSAMU	
	Examiner	Art Unit	
	Alecia D. Nelson	2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 April 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,6-11 and 14-21* is/are rejected.

7)☒ Claim(s) *2-5,12 and 13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/20/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 6/20/02005 have been considered by the examiner.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. ***Claims 1, 6, 10, 11, 15, 17, and 21*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Deguchi et al. (U. S. Patent No. 6,480,202) in view of Nakagawa et al. (U.S. Patent No. 4,246,600)

With reference to **claims 1, 6, 10, 11, 15, 17, and 21**, Deguchi et al. teaches an image display system of environment-compliant type that corrects a color of an image and displays the image based on visual environment information generated by a visual environment detection section (ambient light input section, 101), which detects a visual environment in a display region (103) of the image (see abstract), the display system comprising: a colored-light information processing means (100a) which converts a given color (RGB) within the visual environment information into a coordinate value (XYZamb) within a given color space, and obtains a coordinate value color pair (XYZcrt) with the

converted coordinate value(see column 6, lines 56-64), and correction means (100d) which corrects input-output characteristic data for display that is used by means of displaying the image, based on the obtained coordinate value forming the color pair (see column 7, lines 1-6).

While Deguchi et al. teaches generating coordinate values based on the visual environment and obtains a coordinate value based on the converted coordinate value as explained above, there fails to be any disclosure that the obtained coordinate value color pair forms a complementary color pair comprising colors forming gray when mixed together with the converted coordinate value within the visual environment as recited in the claims.

Nakagawa et al. teaches a color image pick-up system which includes a CCD which is capable of generating a complementary color pair, to the displayed image, forming gray when mixed together (see column 2, line 58-column 3, line 19).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the usage of the complementary color pair similar to that which is taught by Nakagawa et al. to be used as the coordinate value color pair in the device similar to that which is taught by Dguchi et al. in order to thereby improve the brightness of the display device in a plurality of different viewing environments which would normally be affected by the surrounding ambient light conditions.

4. ***Claims 7-9, 14, 16, 18-20*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Deguchi et al. in view of Nakagawa et al. as applied to **claims 6, 11, and 17** above, and further in view of Margulis (U.S. Patent No. 6,456,340).

With reference to **claims 8 and 19**, Deguchi et al. teaches the display device of the system as a CRT type display device, however fails to teach the usage of a projection screen as the display means. The usage of such a display means is well known in the art.

Margulis teaches the usage of a projection screen as the display means (see column 5, lines 23-31).

Therefore it would have been obvious to allow the projection screen similar to that which is taught by Margulis to be used as the display device in a system similar to that, which is taught by Deguchi et al. and Nakagawa et al., in order to thereby provide a projection screen which is capable of performing correction to the image which is being affected by ambient light.

With reference to **claims 7, 14, 13, 16, and 18** Deguchi et al. and Nakagawa et al. teach the display system that corrects a display affected by ambient conditions, however fails to teach that the system performs gamma correction.

Margulis teaches of an image-processing module including color/spatial gamma correction (410) ant temporal gamma processing (412) as well as a plurality of other circuits for improving the image (see column 12, lines 45-58).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow for the usage of the gamma correction similar to that which is taught by Margulis in a system similar to that which is taught by Deguchi et al. to thereby allow for further image correction when correcting the ambient light conditions affecting the display. This thereby promotes optimum display characteristics for viewing.

With reference to **claim 20**, Deguchi et al. teaches that the ambient light input section (101) comprises one or more photosensors and are adapted to detect information on the chromaticity and the brightness of ambient light and supplies the obtained information to the image processing section (100) as information on the viewing environment. The monitor control section (102) automatically alters the TRC characteristics of the monitor (103) according to ambient light and the information selected for it. It also supplies the information on the monitor (103) including the values selected for the reference point, the contrast and the brightness to the image processing section. (see column 7, lines 11-30).

Allowable Subject Matter

5. ***Claims 2-5, 12, and 13*** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to ***claims 1-21*** have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alecia D. Nelson whose telephone number is 571-272-7771. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

adn/ADN
November 21, 2005

SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER